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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,934	12/29/2000	James Neal Richter	RNOT.80303	8042
5251	7590	01/20/2006	EXAMINER	
SHOOK, HARDY & BACON LLP INTELLECTUAL PROPERTY DEPARTMENT 2555 GRAND BLVD KANSAS CITY,, MO 64108-2613			CHEN, TE Y	
			ART UNIT	PAPER NUMBER
			2161	

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/751,934	<b>Applicant(s)</b> RICHTER ET AL.	
	<b>Examiner</b> Susan Y. Chen	<b>Art Unit</b> 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12,14-25,27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,2,4-12,14-25,27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

***Response to Amendment***

This is in response to the amendment filed on 10/14/2005.

Claims 1-2, 4-12 and 14-25, 27-28 are pending for examination, claims 1, 4-5 have been amended; claim 28 has been newly added.

***Terminal Disclaimer***

The terminal disclaimer filed on 10/14/2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,842,748 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 16 and 18, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 16 and 18, the claimed “non-probabilistic network” in the previous amendment has not been removed and is considered by the examiner as new matter because it is not disclosed in the original filed specification.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 16-12, 14-22 and 27, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, it is unclear what “applying an ensemble of clustering algorithms directly proportional to said integer-value weight of said relationship link” refer to [i.e., what are the claimed clustering algorithms? Who applies the claimed ensemble of clustering algorithms? What is meant by “directly proportional to said integer-value weight of said relationship link”?]

As to claims 16 and 18, it is not understood what is meant by “non-probabilistic Network” [i.e., since applicant’s specification fails to define what is the claimed “non-probabilistic Network”, thus, it renders these claims indistinct].

As to claims 2, 4-12, 17-22 and 27, these claims have the same defects as their respective base claims, hence are rejected for the same reason.

Because the ambiguous nature of claims 16 and 18, thus, no art rejection will be given to these claims in the instant office action.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-12 and 14-15, 17, 19-22 and 27-28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz et al. (U.S. Patent No. 6,182,133) in view of Wical (U.S. Patent No. 5,940,821).

As to claim 1 and 28, Horvitz et al. (hereinafter referred as Horvitz) discloses a method as claimed by applicant, comprising:

a) detecting an access of first information item [e.g., the Web server application programs 80, Fig. 1; Fig. 16 and associated text; col. 47, lines 9-18];

b) detecting an access of a second informational item [e.g., the browser 30, Fig. 1; Fig(s) 6 and associated text];

c) establishing that a relationship link exists between said first informational item and second informational item [e.g., the link relationship between Web pages at col. 1; lines 53-59];

d) determining a weight for the relationship link, said weight proportional to the historical frequency of the selection of the combination of informational items [e.g., the simple rank ordering of URLs of Web pages at col. 4, lines 20-47]; and

e) applying an ensemble of clustering algorithms to the combination of said first informational item and said second informational item [e.g., the tagging classification algorithms at col. 43, lines 14-16; the Bayesian or Hidden Markov model processing at col. 24, lines 57 – col. 25, lines 10; col. 28, lines 8-14].

Horvitz did not expressly disclose that the link relationship weight is an integer.

However Wical (U.S. Patent No. 5,940,821) discloses an information item retrieval system with the link relationship weight represented as integer [e.g., Abstract, col. 12, lines 15 – 51; Fig(s). 4, 9a and associated texts].

Horvitz and Wical are both endeavor to enhance an informational document classification mapping of an information query and retrieval system via World Wide Web page activities, therefore, with the teachings of Horvitz and Wical in front of him/her it would have been obvious for an ordinary skilled person in the art at the time the invention was made to be motivated to apply the well known integer-value weight as

disclosed by Wical into Horvitz's information retrieving and classification system, because by doing so, the combined system will be upgraded to have integer-value weight for the relationship link that would be used to facilitate the cross reference selection of informational items processed by the combined system.

As to claim 2, except all the features recited in claim 1 above, the combined system of Horvits and Wical further discloses that the step of detecting the second informational item includes the detecting of a plurality of informational items [e.g., Horvits: col. 4, lines 20-30].

As to claims 4 and 27, except all the features recited in claim 2 above, the combined system of Horvits and Wical further discloses that the step of applying an algorithm for data aging wherein the usage of the relationship link is monitored and used as feed back for the weight associated with the relationship link [e.g., Horvits: col. 5, lines 38-52]; wherein, the data aging runs as a function of traffic load to age the relationship links according to relevance of the relationship links [e.g., Horvits: Fig.(s) 17A-C and associated texts].

As to claims 5-6, except all the features recited in claim 4 above, the combined system of Horvits and Wical further discloses that the step of applying a repeatedly pruning algorithm wherein external information regarding the usefulness of at least one relationship link is utilized to modify the existence of a recorded relationship link and

determine if a recorded relationship link should be removed [e.g., Horvits: the refinement processing at col. 4, lines 50-62; col. 5, lines 11-18; lines 55-60].

As to claim 7, except all the features recited in claim 5 above, the combined system of Horvits and Wical further discloses that the step of applying said pruning algorithm makes use of a user determined feedback of the usefulness of a relationship [e.g., Horvits: col. 28, lines 3-22].

As to claim 8, except all the features recited in claim 2 above, the combined system of Horvits and Wical further discloses that said ensemble includes a plurality of algorithms and wherein said relationship link is weighted in direct proportion to the number of algorithms within said ensemble of algorithms that determine the existence of said relationship link [e.g., Horvits: col. 32, line 63 – col. 33, line 14; Fig. 11A-11B and associated texts].

As to claim 9, except all the features recited in claim 2 above, the combined system of Horvits and Wical further discloses that said relationship link is positioned in a list in direct proportion to the degree of consensus among said ensemble of algorithms [e.g., Horvits: col. 10, lines 47-61].

As to claim 10, except all the features recited in claim 2 above, the combined system of Horvits and Wical further discloses that said ensemble includes a plurality of



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algorithms and each of said algorithms runs independently of all other algorithms [e.g., Horvits: col. 11, lines 6-12].

As to claim 11, except all the features recited in claim 2 above, the combined system of Horvits and Wical further discloses the step of merging the outputs of said ensemble of algorithms [e.g., Horvits: col. 12, lines 1-20, Fig. 2 and associated texts].

As to claim 12, except all the features recited in claim 2 above, the combined system of Horvits and Wical further discloses the step of recording said relationship link in a non-Bayiesian-type network [e.g., Wical: the unit 115, Fig. 2 and associated texts; Fig. 4 and associated texts].

As to claims 14-15, 17, 19, 20-22, these claims recited the same features as claims 1-11 in form of computer apparatus or a readable storage medium product, hence are rejected for the same reason.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Zellweger (U.S. Patent No. 5,630,125).

Zellweger disclosed a system having method as claimed by applicant, including:

a) recursively determining (or reexamining) an efficient path for a particular help item (or a subsequent help item) of interest, based on the context in which the help item (or subsequent help item) is sought [Abstract, Improving Menu Access, col. 8, line 65 - col. 9, line 56, Fig. 8 and associated texts]; and

b) dynamically changing and storing the context as well as path in which a help item (or a subsequent help item) is sought by any subsequent user [col. 5, lines 5-17; col. 7, lines 1-5; col. 8, lines 4-34, 50-62; for example, see the logical flow, configuration, browsing, bookmark, and file distribution processing of Fig(s). 7-8,13-15 and associated texts].

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-2, 4-12 and 14-22 and 26-28 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to claims 23-25 have been fully considered, but they are not persuasive. Because the recitation and status of independent claim 23 have not been amended as argued by applicant [e.g., see Page 15, lines 14-17 of

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instant amendment], thus the original recitations of claims 23-25 are still read by Zellweger's art, as such the examiner maintains the same type of rejection position.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen  
Examiner  
Art Unit 2161

January 4, 2006



**UYEN LE**  
**PRIMARY EXAMINER**